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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/771,803      | 01/29/2001  | William G. Blasius   | 2000US201           | 7831             |

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CLARIANT CORPORATION  
INTELLECTUAL PROPERTY DEPARTMENT  
4000 MONROE ROAD  
CHARLOTTE, NC 28205

EXAMINER

FONTAINE, MONICA A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1732

DATE MAILED: 02/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/771,803

Applicant(s)

BLASIUS ET AL.

Examiner

Monica A Fontaine

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1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 1-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Priority*

Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

### *Claim Objections*

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 6, 7, 8, 9, 10, and 11 have been renumbered to be claims 5, 6, 7, 8, 9, and 10, respectively.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Renumbered claims 1-9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. (U.S. Patent 6,046,265). Regarding Claim 1, Clark et al., hereafter "Clark," show that it is known to produce a shaped article having a color swirl effect on the surface of the shaped article (Column 2, line 16) by carrying out the process comprising a) providing a first

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color concentrate comprising a first colorant concentrate in a matrix of crystalline/amorphous resins (PBT/PCT or PEN/PCT: Examples 6 and 7, Column 11), b) providing a flowable organic polymer that is compatible with the said color concentrate (Column 1, line 44), c) transferring the color concentrate and the flowable organic polymer to an extruder or molding machine capable of producing shaped articles (Column 2, lines 18-19), d) providing sufficient heat to maintain the temperature of the mixture from step "c)" above the glass transition temperatures of the polymers in steps "a)" and "b)", e) and forming a shaped article by providing sufficient pressure and mixing necessary to produce a shaped article and thereby distributing the color concentrates so as to impart a color swirl effect on the surface of said shaped article (Column 2, lines 14-21). Regarding step "d)", it would have been obvious to one of ordinary skill in the art at the time the invention was made to maintain the temperature of the mixture of step "c)" below the melting or flow temperature of the crystalline polymer of step "a)" by considering the disclosed temperature difference required to form the desired swirl effect (Column 4, lines 1-8; Column 4, lines 24-28). Clark does not explicitly teach adding a second colorant, however he does show that it is known for additional coloring to be added during the process (Column 11, lines 55-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a second colorant carried in a compatible resin to the first colorant concentrate and subsequently to the flowable polymer in order to produce a multicolored article. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to keep the mixture above the temperature at which the amorphous polymers of step "a)" melt or flow in order to prevent the colors carried by amorphous polymers from mixing with the flowable polymer in excess of a desired amount. Regarding Claim 2, Clark

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shows that it is known for the flowable organic polymer to be thermoplastic (Column 1, lines 36-39), meeting applicant's claim. Regarding Claim 3, Clark shows that it is known for the first and optional second colorants to be pigments (Column 4, lines 49-52; Column 11, lines 55-60), meeting applicant's claim. Regarding Claim 4, Clark shows that it is known for a compatible amorphous polymer, used both with a colorant or as the flowable organic polymer, to be a copolymer of a vinyl aromatic monomer and a C<sub>1</sub> to C<sub>4</sub> methacrylate (methylmethacrylate copolymer: Column 6, lines 15-16), meeting applicant's claim. Regarding renumbered Claim 5, Clark shows that it is known for the crystalline organic polymer of step "a)" is a polymer of vinyl aromatic monomer that are substituted by a C<sub>1</sub> to C<sub>4</sub> alkyl group (polystyrene: Column 12, lines 39-41), meeting applicant's claim. Regarding renumbered Claim 6, Clark shows that it is known for step "c)" to occur in an injection molding machine or a blow molding machine (Column 2, lines 51-54), meeting applicant's claim. Regarding renumbered Claim 7, Clark shows that it is known for step "c)" to occur in an extruder (Column 2, line 18), meeting applicant's claim. Regarding renumbered Claims 8 and 9, Clark shows that it is known for a colorant to comprise from 0.5 to 5 weight percent of a color concentrate (Column 3, lines 45-50), meeting applicant's claims.

Renumbered Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, in view of Gray et al. (U.S. Patent 5,984,556). Clark shows the basic process as claimed as discussed above, but does not teach producing articles related to writing instruments. Gray et al., hereafter "Gray," show that it is known to extrude a writing instrument barrel (Column 2, lines 21-36). Gray and Clark are combinable because they are concerned with a similar technical field, namely, that of extruding a plastic material to form a shaped article. It would have been

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obvious to one of ordinary skill in the art at the time the invention was made to form Gray's writing instrument barrel with Clark's extrusion molding process in order to produce a barrel in the most effective manner possible.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents have been cited to further show the state of the art with regard to the marbelization of plastic materials:

U.S. Patent 4,125,582 to Langlois

U.S. Patent 4,183,673 to Easley et al.

U.S. Patent 5,053,176 to Cameron et al.

U.S. Patent 5,387,381 to Saloom

U.S. Patent 5,489,656 to Ohtsuka et al.

U.S. Patent 6,421,486 to Daneshvar et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A Fontaine whose telephone number is 703-305-7239.

The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rick Crispino can be reached on 703-308-3853. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9310 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

maf  
January 27, 2003



JILL L. HEITBRINK  
PRIMARY EXAMINER  
ART UNIT 1732

1/27/03